

**REAGENTS AND METHODS FOR SOLID PHASE
SYNTHESIS AND DISPLAY**

ABSTRACT OF THE DISCLOSURE

5 New compounds, compositions and methods which find application in solid phase synthesis including the preparation of high-density arrays of diverse polymer sequences such as diverse peptides and oligonucleotides as well as in preparation of arrays of small ligand molecules. The compounds of the present invention are those which are typically referred to as linking groups, linkers or spacers and include unsymmetrical
10 disulfide linking groups, and 1,3-diol derivatives capable of providing a triggered release of an attached compound from a solid support under mild conditions. Additional new compounds are labels which can be incorporated into either the 3' or 5' terminus of a DNA oligomer.